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# SPACE WAR

## ENTERTAINMENT

Two-player galactic shoot-out  
(ages 6-10)

**by Jay Jaeger**

Requires: One ATARI Joystick Controller

Cassette version (1):  
(APX-10224)

ATARI 410 or 1010 Program Recorder  
16K RAM

Diskette version (1):  
(APX-20224)

ATARI 810 or 1050 Disk Drive  
24K RAM

Edition A

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# SPACE WAR

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by

Jay R. Jaeger

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# Introduction

## OVERVIEW

Born at the Massachusetts Institute of Technology in 1962, SPACE WAR was probably the first computer arcade-style game. Now you can play it on your ATARI Home Computer.

SPACE WAR is a fast-paced two-player action game pitting two players (or one player versus the computer) with rockets and missiles against each other. Each player controls his or her rocket and missiles with a joystick, using it to turn, accelerate, decelerate, and fire missiles at the enemy. A scoreboard at the top of the screen tallies each missile hit.

While all of this is going on, you must contend with the gravity pull (or push) of the sun, blazing in the center of the galaxy and bending you and your enemy's flight path. You can even orbit the sun to put you in position to shoot at your enemy!

Five gravity strengths, three gravity modes, wrap and bounce modes, and four speeds total for 88 distinct combinations of play. You can play against the computer, and choose from three distinct end of game options. SPACE WAR never becomes boring!

SPACE WAR challenges you and your friends to an exciting, action game, tailored to your ability and desires. Relive a little bit of computer history in your home with SPACE WAR.

## REQUIRED ACCESSORIES

One ATARI Joystick Controller per player

Cassette Version

16K RAM

ATARI 410 or ATARI 1010 Program Recorder

Diskette Version

24K RAM

ATARI 810 or ATARI 1050 Disk Drive

## CONTACTING THE AUTHOR

Users wishing to contact the author about SPACE WAR may write him at:

2719 Victoria Lane  
Madison, WI, 53704

## Getting started

### LOADING SPACE WAR INTO COMPUTER MEMORY

1. Remove any program cartridge from the cartridge slot of your computer.
2. Plug your Joystick Controller into the first controller jack of your computer console or plug two joysticks into the first two jacks if you're using the two-player version.
3. If you have the cassette version of SPACE WAR:
  - a. Have your computer turned off.
  - b. Turn on your TV set.
  - c. Insert the SPACE WAR cassette into the program recorder's cassette holder and press REWIND on the recorder until the tape rewinds completely. The press PLAY to prepare the program recorder for loading the program.
  - d. Turn on the computer while holding down the START key.
  - e. When you hear a beep, release the START key and press the RETURN key. The program will load into computer memory and start automatically.

#### If you have the diskette version of SPACE WAR:

- a. Have your computer turned OFF.
- b. Turn on your disk drive.
- c. When the BUSY light goes out, open the disk door and insert the SPACE WAR diskette with the label in the lower right-hand corner nearest to you. Close the door. (Use disk drive one if you have more than one drive.)
- d. Turn on your computer and your TV set. The program will load into computer memory and start automatically.



## THE FIRST DISPLAY SCREEN

When SPACE WAR has loaded into computer memory, the first screen appears:

```
-----  
:                                     :  
:      SPACE WAR                     :  
:                                     :  
: (C) J. JAEGER 1983                 :  
:                                     :  
:  *2 PLAYERS                       :  
:  NO LIMIT                         :  
:  NORMAL                           :  
:  GRAVITY                          :  
:  WRAP                             :  
:  NORMAL SPEED                     :  
:                                     :  
-----
```

Figure 1: Option Menu

## Playing SPACE WAR

### OPTION MENU

When you begin to play SPACE WAR, or any time you press the SYSTEM RESET key, the option menu (Figure one) is displayed. This screen allows you to choose different game possibilities.

This screen also displays your current choice you pick at each line. These lines are, from top to bottom, number of players, end of game option, gravity strength, gravity mode, bounce or wrap, and game speed.

Press the OPTION key to move the asterisk to a new line, accompanied by a beep. When the asterisk gets to the bottom of the list, it moves to the top.

Press the SELECT key to operate the line marked by the asterisk. Each time you press the SELECT key the computer beeps and another possibility displays to the right of the asterisk.

Select the normal two-player SPACE WAR game, or the one-player version. In the two-player game, the player whose joystick is plugged into jack #1 controls the left (red) rocket, and the player whose joystick is plugged into jack #2 controls the right (white) rocket. In the single player "practice" mode you control the blue rocket with a joystick plugged into jack #1 and the computer controls the white ship. If you don't make a selection, you stay in the two-player game.

Choose from three different end of game options: no limit, a 10 point limit, or a 21 point limit. If you choose the no limit option the computer will never end the game. With the 10 or 21 limit, when either player reaches the appropriate number of points, "GAME OVER" appears on the bottom of the screen and the game stops. You may begin another game by pressing START. If you don't make a selection, you stay in the no limit option.

Next choose the gravity strength you'd like. You can select from five different gravity strengths: very weak, weak, normal, strong, and very strong. If you don't make a selection, you stay at normal strength.

Select from three different gravity directions: no gravity, normal gravity (towards the sun), and anti-gravity (away from the sun). If you don't make a selection, you stay with normal gravity. Note

that if you select the no gravity mode, the gravity strength makes no difference.

Select either bounce or wrap mode. If you select bounce mode your rocket will bounce off the edge of the screen with a resounding FWEEP. If you select wrap mode, your rocket will disappear and... immediately reappear on the opposite edge of the screen in the following pattern:

```
Left    -->  Right
Right   -->  Left
Top     -->  Bottom
Bottom  -->  Top
```

If you don't make a selection, you stay with the wrap mode.

Finally you select from four different speeds: very slow, slow, normal, and fast. If you don't make a selection, you get normal gravity. Note that the game is smoother at the higher speeds, but you have less time to react.

## STARTING THE GAME

First, make sure your joystick controller(s) is plugged into jack #1 (and 2 for the two-player game) of your computer console. Hold the joystick controller so that the red button is in the upper left corner. Press the START key to start the game from the option menu or to begin a new game.

## THE GALAXY

The galaxy playfield is displayed on the screen. At the top of the screen you see a scoring area. In the top left corner is the score for player 1. In the top right corner is the score for player 2. At the bottom of the screen is the program title, SPACE WAR.

Scattered throughout the galaxy are dozens of tiny stars, to aid your navigation around the galaxy. These stars don't otherwise affect play.

In the middle of the galaxy is a blazing sun. The sun is the source and center of any gravity you select.

The two players' rockets appear in their respective corners, ready for battle.

## PLAYING THE GAME

Immediately after the galaxy appears the game begins. If you're playing with gravity, the sun either pulls you towards it (normal gravity) or pushes you away (anti-gravity). Act fast or you're pulled into the sun and whipped around the galaxy at tremendous speeds. Fortunately, you and your enemy are equipped with solar radiation shields; no matter how close you get to the sun your rocket will NOT be destroyed. However, you start to move so fast due to the gravitational slingshot effect that you can lose control of where you're going, bouncing all around the galaxy (these shields prevent mutual destruction if you and your enemy accidentally collide).

Your missiles, however, are NOT equipped with shields, so they're destroyed if they collide with the sun. After some practice, you will be able to use the gravity field to your advantage by orbiting the sun to get a good firing angle on your enemy and by using the gravity field near the sun to escape.

**The rockets are controlled by the joystick as follows:**

## Accelerate

⋮

Rotate Left-----Rotate Right

When you push your joystick away from you, your rocket engines are ignited. Your ship then accelerates in the direction it's pointed. If you release the joystick you'll continue to move at the same speed. In order to stop you must point your rocket in the opposite direction from which you're traveling and start your engines.

You may rotate your rocket right or left by pushing the joystick right or left. Your rocket turns in the desired direction.

The red joystick button is used to fire your missiles at your enemy. When you fire a missile your rocket beeps to confirm firing. You can only have 2 missiles loose in the galaxy at any one time. If a missile collides with the sun it's destroyed, and you can then fire another one. If you collide with your own missile, the missile goes back into its firing tube, ready to be fired again. If a missile reaches the edge of the galaxy it's lost forever (the bad news), but you can then fire another missile (the



good news).

When a missile hits an enemy rocket, it explodes, breaking the rocket into a zillion little pieces. The roar of the explosion can be heard throughout the galaxy. The appropriate side is credited with a point, and the battle continues.

## SCORING

Each time a missile destroys a rocket, the side firing the missile wins a point on the scoreboard at the top of the galaxy display. Depending on the scoring option you've selected, the game ends at 10 points, 21 points, or has no program-determined scoring limit.

## SPECIAL KEYS

To preserve your sanity, if the phone rings (or anything interrupts you) you can declare a temporary truce by pressing the space bar to freeze all action on the screen. Press the space bar again to break the truce and battle resumes.

If you reach the scoring limit, press the START key to begin a new game, or the SYSTEM RESET key to return to the option menu. The last set of choices is displayed on the screen, and you may change them.

## PROBLEMS

If you get going too fast, it's very hard to slow down. This effect is accurate in terms of the physics involved, but can be very frustrating to the novice. Practice helps!

A more serious problem is that at the slower speeds the rocket may appear to be blurry or have a ghost. As you improve your skill and move to the faster speeds, this effect lessens, and at the fastest speed option it disappears entirely.

## Acknowledgments

Many folks have witting or unwitting contributions to SPACE WAR, and deserve much thanks. These include:

- ATARI, INC. for making the computer available to more and more people.
- Digital Equipment Corporation, who did the same thing in the 1960's.
- My wife, for putting up with me while I developed SPACE WAR.
- "The Legend of Space War!", Creative Computing, August, 1981
- The authors of ATARI Macro Assembler.
- The author(s) of the APX program-text editor.
- The friends who tried out SPACE WAR, and who gave me valuable suggestions and ideas.





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1. Name and APX number of program.

Space War (224)

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3. What do you especially like about this program?

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5. How can the catalog description be more accurate or comprehensive?

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- \_\_\_\_\_ Use (non-game programs)
- \_\_\_\_\_ Imaginative graphics and sound



7. Describe any technical errors you found in the user instructions (please give page numbers).

8. What did you especially like about the user instructions?

9. What revisions or additions would improve these instructions?

10. On a scale of 1 to 10, 1 representing "poor" and 10 representing "excellent", how would you rate the user instructions and why?

11. Other comments about the program or user instructions:

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